UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/478,788	01/07/2000	CHRIS MARSHALL	JAO32430A	2161

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EXAMINER
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ART UNIT	PAPER NUMBER
2127	5

DATE MAILED: 04/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _07 January 2000_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,4-9,12-17 and 19-22_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1, 4-9, 12-17, 19-22_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this
or a foreign country, before the invention thereof by the applicant for a patent.

2.   Claims 1, 9, 17, and 23-25 are rejected under 35 U.S.C. 102(a) as being anticipated by

Cowsar et al. (USPN 5,615,400) (hereinafter Cowsar).

As per claim 1, Cowsar discloses a data processing apparatus that performs, in a

predetermined order, one or more processes from among a plurality of processes, on

predetermined data, the data processing apparatus comprising:

storage means for storing a plurality of functions, each function including one of the

plurality of processes and a call-out command that calls out a next one of the plurality of

functions (col. 6 lines 13-55, "The high speed memory will store at least one client application",

"The second level dispatch routine calls the lookup function to find information about the called

function in the resource set catalog", wherein the high speed memory is the storage means and

the dispatch routine calls the function and links it to the client that called it);

execution means for executing the process described by each of the plurality of functions

(col. 22 lines 19-35, "The stub dispatcher then obtains the address of the actual dispatching code

from a low-memory global set up when SLM was originally loaded, and it jumps to that code",

wherein the dispatcher sends the code to the processor for execution); and

call out means for calling out the next one of the plurality of functions from the storage

means in accordance with the call-out command of a function being executed by the execution

means after the process of the function being executed by the execution means is completed (col.

11 lines 33-50, "the lookup class function of the class catalog is called to get the TClass record

for the derived class", wherein the lookup function finds the next function to call, and the linking

is done as described in col. 6 lines 43-55).

As per claims 9 and 17, they are rejected for similar reasons as stated for claim 1 above.

As per claim 23, Cowsar discloses the data processing apparatus of claim 1, wherein the

call-out command includes an address of the next function in the storage means. It is inherent in

Cowsar to look up the next function to be performed in that when the apparatus determines that

the next function is to be loaded from memory for execution, the look up function (col. 11 lines

33-50) would have to retrieve it from memory. As such, this limitation, although not expressly

stated in Cowsar is done inherently by the lookup function.

As per claims 24 and 25, they are rejected for similar reasons as stated for claim 23

above.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 4, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cowsar in view of Ehlig et al. (USPN 6,134,578) (hereinafter Ehlig).

As per claim 4, Cowsar does not specifically disclose the data processing apparatus of

claim 1, wherein the execution means repeatedly executes the process of each of the plurality of

functions for only a predetermined number of times in accordance with predetermined repetition

information.

Ehlig discloses the execution means repeatedly executes the process of each of the

plurality of functions for only a predetermined number of times in accordance with

predetermined repetition information (col. 19 line 57 – col. 20 line 2, "When this repeat feature

is used, the instruction is executed, and the RPTC is decremented until the RPTC goes to zero",

wherein the process is repeatedly executed until the value of the register is zero).

It would have been obvious to one of ordinary skill in the art to combine Cowsar with

Ehlig since it would improve upon the apparatus of Cowsar by allowing the certain functions to

be executed more than once if necessary, thus adding another dimension of functionality to the

system.

As per claims 12 and 19, they are rejected for similar reasons as stated for claim 4 above.

5.   Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cowsar

in view of Farrell et al. (USPN 5,630,128) (hereinafter Farrell).

As per claim 5, Cowsar does not specifically disclose the data processing apparatus of

claim 1, further comprising change means for changing the call-out command of the functions

from a first one of the plurality of functions to a second one of the plurality of functions.

Farrell discloses change means for changing the call-out command of the functions from

a first one of the plurality of functions to a second one of the plurality of functions (col. 10 lines

29-52, "the ThreadSetDispatchClass function removes the calling thread from the calling

thread's current dispatch class by changing the chain pointers", wherein the function call being

changed is actually in the form of a thread, and is done by redirecting of pointers).

It would have been obvious to one of ordinary skill in the art to combine Cowsar with

Farrell since it would improve the apparatus of Cowsar by allowing dynamic changing of

functions at run-time. For instance, if conditions within the data processing apparatus make it so

that the goal of a process changes, the functions associated therein could be modified to suit the

new goal.

As per claim 13, it is rejected for similar reasons as stated for claim 5 above.

6.   Claims 6, 8, 14, 16, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Cowsar in view of Kitahara et al. (USPN 5,634,850) (hereinafter Kitahara).

As per claim 6, Cowsar does not specifically disclose the data processing apparatus of

claim 1, wherein the predetermined data includes image data.

Kitahara discloses that the predetermined data includes image data (col. 2 lines 50-60,

"The disk stores...sound data and image data").

It would have been obvious to one of ordinary skill in the art to combine Cowsar with

Kitahara because it would provide the apparatus with the improved capability to perform data

processing on image and sound data in sequential order.

As per claims 14 and 20, they are rejected for similar reasons as stated for claim 6 above.

As per claim 8, Cowsar does not specifically disclose the data processing apparatus of

claim 1, wherein the predetermined data includes sound data.

Kitahara discloses the predetermined data includes sound data (col. 2 lines 50-60, "The

disk stores...sound data and image data").

It would have been obvious to one of ordinary skill in the art to combine Cowsar with

Kitahara for reasons stated above.

As per claims 16 and 22, they are rejected for similar reasons as stated for claim 8 above.

7.   Claims 7, 15, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cowsar in view of Kitahara as applied to claims 1 and 6 above, and further in view of Austin et

al. (USPN 5,761,396) (hereinafter Austin) and Kataoka (USPN 5,831,744).

As per claim 7, the modified Cowsar does not specifically disclose the data processing

apparatus of claim 6, wherein the processes are image processes including a gamma

compensation process, a resolution-conversion process and an outline-adjustment process.

Kataoka discloses image processes including a gamma compensation process (col. 2 lines

50-65, "the image processing unit 16, as shown in Fig. 2, has...a γ compensation portion").

Austin discloses image processes including a resolution-conversion process and an

outline-adjustment process (col. 9 lines 13-32, "the image processing section includes one or

more dedicate processors programmed to perform various desired functions, such as...resolution

conversion and TRC adjustment", wherein TRC adjustment could perform outline adjustment).

It would have been obvious to one of ordinary skill in the art to combine the modified

Cowsar with Kataoka and Austin since Kataoka and Austin provide a way of allowing specific

types of image processing to be performed.

As per claims 15 and 21, they are rejected for similar reasons as stated for claim 7 above.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Syed J Ali whose telephone number is (703) 305-8106. The

examiner can normally be reached on Mon-Fri 8-5:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone numbers for

the organization where this application or proceeding is assigned are (703) 746-7239 for regular

communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Syed Ali
April 6, 2003

MAJID BANANKHAH
PRIMARY EXAMINER